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A REVIEW OF THE USAID GRANT TO UNICEF FOR EPI IN UGANDA, AND A FOLLOW UP VISIT ON STRENGTHENING DISEASE SURVEILLANCE IN UGANDA

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Mark Weeks

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ACRONYMS

AFP	Acute Flaccid Paralysis
AIDS	Acquired Immunodeficiency Syndrome
BASICS	Basic Support for Institutionalizing Child Survival
BCG	Bacillus Calmette-Guerin
CCB	Community Capacity Building
DHMT	District Health Management Team
DPT	Diphtheria Pertussis Tetanus
EPI	Expanded Program on Immunization
GOU	Government of Uganda
HIV	Human Immunodeficiency Virus
LC	Local Council
MOH	Ministry of Health
NIDs	National Immunization Days (for polio)
NNT	Neonatal Tetanus
ODA	Overseas Development Assistance
OPV	Oral Polio Vaccine
PDC	Parish Development Committee
PHC	Primary Health Care
UNEPI	Uganda National Expanded Programme on Immunization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

I EXECUTIVE SUMMARY

Between May 29 and June 6, 1997, a BASICS technical officer (T.O.) participated in the country review of USAID's grant to UNICEF for the Uganda National Expanded Programme on Immunization (UNEPI). Following this review, the T.O. remained an additional week to assist UNEPI with the revision of their plans and budget for disease surveillance. The observations and recommendations from the grant review are found in the team's draft report in Appendix B. The following summarizes the key observations and recommendations concerning disease surveillance.

UNEPI's implementation plan for disease surveillance focused almost entirely on acute flaccid paralysis (AFP) surveillance. Although the plans and budget had been revised to fit the changes and opportunities arising from decentralization and community capacity building, further revision is needed to incorporate more activities concerning measles and neonatal tetanus (NNT) surveillance, and case/outbreak investigation.

The Government of Uganda's (GOU) decentralization process and UNICEF's Community Capacity Building (CCB) Project provide considerable potential for increasing awareness about the EPI diseases and for improving the detection and reporting of EPI diseases. However, many unanswered questions remain concerning the feasibility of utilizing yet developed community structures. UNEPI's first priority for establishing disease surveillance should be to ensure that the District Health Management Teams (DHMT) are adequately prepared, both technically and financially, for responding to reports of the EPI diseases. Also, more follow up by UNEPI in the districts is necessary to get the districts more involved in surveillance by developing plans for active surveillance.

Districts in Uganda cannot entirely finance their disease surveillance activities. To meet the global deadline for eradicating polio, donors will have to provide a significant amount of the local operational costs required for investigating reports of AFP. In addition continued donor support is necessary for surveillance and follow up on NNT cases and measles outbreaks, as well as the other costs associated with developing a surveillance system, such as training, monitoring, and supervision.

UNEPI is working toward establishing a reliable and sustainable disease surveillance system. Their efforts and experiences will contribute considerably to the development of appropriate surveillance systems in Africa. However, UNEPI's gains will be eroded if the priority of finding every case of AFP displaces efforts to establish an integrated and sustainable surveillance system. A large infusion of donor funds targeted only at AFP/polio surveillance will only produce a short lived and costly system.

UNEPI requested technical assistance from BASICS for the preparations (e.g., methods, terms of reference, questionnaires) and participation in their program review which is tentatively scheduled for November 1997.

II PURPOSE OF THE VISIT

The purpose of this visit was to participate on a team composed of UNICEF, USAID, and WHO to review USAID's grant to UNICEF for the Uganda National Expanded Programme on Immunization. The grant review was conducted to "(1) better understand the links between health sector reform, immunization delivery, and disease control and eradication strategies; and (2) gain insight on developing future strategies and activities for donor support to Uganda, as well as other African countries, for sustaining and strengthening immunization services within the national context of decentralization." In addition, the visit provided an opportunity for follow up on previous assistance from BASICS to UNEPI on strengthening their disease surveillance system.

III BACKGROUND

USAID UNICEF EPI Grant

Beginning in 1993, USAID initiated a grant to UNICEF for supporting and strengthening EPI in Africa. Over the past 5 years, US$ 23 million has been provided through this grant to 18 countries in Africa, including US$ 2 million for EPI in Uganda between 1994 and 1996. USAID initiated a review of this grant in 1997. The review consisted of two parts: (1) a desktop review of the progress of EPI based on data provided by the EPI programs through the UNICEF field offices and compiled by UNICEF/NY, using a questionnaire developed by USAID and BASICS; and (2) four country visits, including Uganda. Additional background information on the grant and the review process are found in the draft report prepared by the grant review team for Uganda, Appendix B.

Uganda

Uganda borders Sudan to the north, Kenya to the east, Tanzania to the south, Rwanda to the southwest, and Zaire to the west. The country is now divided into 39 districts as a result of sub dividing several districts over the past few years. According to a projection from the 1991 census, the population for 1997 is approximately 19 million. This population is expected to double in 28 years.

In 1991, Uganda ranked among the top 10 countries in the world for improving measles immunization coverage by increasing national coverage from below 40 percent in 1986 to 78 percent by 1990 (THE LANCET). However, since the early 1990s, UNEPI has not been able to significantly increase immunization coverage. According to the 1994 UNEPI Programme Review, major obstacles against increasing coverage included a very high drop out rate, poor communication between health workers and mothers, and the absence of monitoring at district and health unit levels. These obstacles remain.

UNEPI has always had strong political support from the government, as well as substantial international support from donors and NGOs. UNICEF, through multi-lateral donations, has consistently provided approximately two million dollars per year in operational and commodity support. Since the early 1980s and until 1994, Save the Children Fund (UK) provided technical advisers to the programme.

Over the past five years major changes have occurred in Uganda which have significant implications for delivering immunization services. These changes include decentralization of the government; civil service restructuring; introduction of a more integrated approach to health service delivery; new programmes and projects, especially at the district level; and increased emphasis on developing community capacity to participate in the planning and managing of health activities. In addition to these changes, the implementation of national immunization days (NIDs) for polio eradication have required significant amounts of staff time at central and district levels, thereby increasing demands on staff and management at all levels.

BASICS has made two previous visits to assist UNEPI. The first assignment in November 1996 involved assisting with preparations for the country's first NIDs. The second visit, February 1997, was made to help with initiating a planning process for establishing disease surveillance systems in the districts.

IV TRIP ACTIVITIES

A five member USAID UNICEF grant review team visited Uganda between May 29-June 6, 1997. Discussions were held with UNICEF/Kampala, Ministry of Health officials, UNEPI, other partners in immunization and primary health care (PHC) (WHO, USAID, ODA), and the Ministry of Local Government. The team visited Kiboga and Rukungiri districts and met with district and subcounty health staff and administrators. The team also met with a Parish Development Committee (PDC) in Kiboga District and visited two health centers, one in each district. During the third week the BASICS T.O. worked with UNEPI's disease surveillance working group to revise the work plan, training materials, and the budget for disease surveillance. Appendix A lists the persons met.

V OBSERVATIONS AND RECOMMENDATIONS

Grant Review

The observations and recommendations from the review of the USAID grant to UNEPI are found in the team's draft report in Appendix B.

Disease Surveillance

The Work Plan and Training Materials

At the onset of this visit UNEPI's implementation plan for surveillance focused almost entirely on AFP surveillance. UNEPI has already developed guidelines and forms for measles control and a neonatal tetanus (NNT) case report form. It will be an enormous missed opportunity not to take advantage of the experience and the available materials for NNT and measles, as well as the ongoing surveillance training being conducted with polio eradication funds. Equal attention should be given to measles and NNT. **UNEPI should incorporate into its work plan, training, and budget, all of the activities and funding needs for measles and NNT surveillance, with the necessary follow up action.**

Decentralization and Community Capacity Building

The GOU's decentralization process and UNICEF's Community Capacity Building (CCB) Project provide considerable potential for increasing awareness about the EPI diseases and for improving the detection and reporting of EPI diseases. The close collaboration between UNICEF and UNEPI at the central level certainly adds to this potential for gaining support and participation from communities in disease surveillance.

On the other hand, the country's decentralization and CCB processes leave many unanswered questions, particularly concerning funding for district and community health activities like disease surveillance. With the massive economic obstacles and limited government funding, districts are likely to regard disease surveillance as a low priority. Although showing great promise, the CCB process is some what experimental and will take a long time to develop. At the time of this visit only 4 of the 39 districts (10%) had even begun to form Parish Development Committees (PDC), the key component of the CCB process which will establish the community structures for health related matters. The timing for implementing CCB nationwide parallels the deadline for polio eradication, December 31, 2000, and therefore, the CCB infrastructure may not be in place in many areas in time to fully benefit the polio eradication effort. Furthermore, securing and sustaining active participation by community volunteers, as the CCB process promotes, will be limited by the lack of technical skills among the volunteers, the lack of remuneration for their services, and the demand for their participation by other programs.

Because of the unknown ramifications evolving from the changes taking place in Uganda, UNEPI will need to carefully balance its involvement and reliance on decentralization and the CCB process as a means for building a disease surveillance system, such that their efforts in community participation do not displace the work necessary to build the epidemiological capacity of the DHMTs. Given UNEPI's very limited staff for surveillance, this will be a very delicate balance. **UNEPI's first priority for establishing disease surveillance should be to ensure that the DHMTs are adequately prepared, both technically and financially, for responding to reports of the EPI diseases.**

During a visit with members of a PDC, the T.O. observed that immunization coverage rates in the community register were incorrect. The council member had used the rate for fully immunized children as the coverage rates for all antigens. For example, if 50 percent of the children had been fully immunized, then BCG coverage was reported as 50 percent, DPT1 as 50 percent, DPT3 as 50 percent, and so forth. This observation emphasizes the importance of UNEPI's role in the decentralization and CCB processes of ensuring consistency and accuracy of EPI-related information in the local systems and structures as they develop. **UNEPI should closely monitor the development of CCB-related tools, methods, training curricula, and practices to help ensure the quality of EPI information and services.** (UNEPI's role in the context of decentralization and the CCB process is further discussed in the attached USAID grant review report.)

District Capacity

UNEPI has made considerable progress in strengthening disease surveillance by conducting training on AFP surveillance in several districts. Several workshops, as well as NIDs-associated training, have been held since the last visit by BASICS in February 1997. However, based on observations in two districts, building district capacity for establishing surveillance and for investigating cases and outbreaks still requires much attention. So far, all of the AFP case investigations have been conducted by the National Polio Laboratory and UNEPI. The DHMTs interviewed during this visit still seem to view surveillance as the responsibility of the central level. **To get DHMTs more active in disease surveillance, UNEPI should increase follow up in the districts for developing district plans for disease surveillance.** (The T.O. recognizes that this recommendation is very demanding and somewhat idealistic considering that the UNEPI disease surveillance working group is already putting forth considerable time and effort, and that members of the group also have responsibilities for NIDs and their routine work.)

All districts lack the financial resources to investigate and respond to reports of EPI diseases. The chronic insufficient funding from the central government and the lack of local revenue has become even more critical by the government's recent decision to allocate 65 percent of local revenues for the subcounty level. In other words, only 35 percent of revenue collected in a district will be available for all district government operations. Even more alarming, GOU funding for health continues to decline.

To meet the global deadline for eradicating polio, donors will have to provide a significant amount of the local operational costs required for investigating AFP cases, in addition to the other costs for developing a surveillance system, such as training, monitoring, and supervision, and surveillance for measles and NNT.

Discussions with two DHMTs suggest that they lack direction on investigating and responding to cases and outbreaks, especially NNT and measles. One DHMT member interviewed was not well informed about AFP even though this person had recently attended a workshop on integrated disease surveillance. However, neither of the two districts visited had undergone

UNEPI's training or planning exercise on disease surveillance. **Whenever possible, UNEPI should provide a facilitator during any MOH surveillance-related training activities to ensure that the EPI-related content is adequately covered.**

Budget

At the beginning of this assignment the UNEPI 1997/98 budget for disease surveillance focused almost entirely on AFP surveillance and the polio eradication initiative. Many of the activities in the budget concerned training and meetings, and the budget did not contain the costs required for district surveillance operations. By the end this assignment, the budget had been tailored more toward the country's decentralization process. For example, the revised categories in the plan and budget now include *Strengthening Capacity for Routine EPI Disease Surveillance and Monitoring; Communication Strategy for Surveillance; Management and Coordination; and Operational Research.* At the time of departure, the estimated 1997/98 surveillance budget amounted to approximately $300,000. **However, more revision is necessary to fine tune the budget, to incorporate the districts costs for surveillance and case investigations, and to add the costs for NNT and measles epidemiologic investigations.**

Global Influence

UNEPI is working toward establishing a reliable and sustainable disease surveillance system. Their efforts and experiences will contribute considerably to the development of appropriate surveillance systems in Africa. However, establishing reliable disease surveillance in every district is a formidable task and will take time, especially considering the limited number of UNEPI staff and the lack of experience in developing low cost, effective, and sustainable surveillance systems in Africa. **As the global deadline for eradicating polio approaches, if the priority of finding every AFP and polio case displaces efforts to establish an integrated and sustainable surveillance system, UNEPI's efforts will be eroded. A repeat of the Smallpox Eradication Programme approach—implanting large numbers of short-term expatriate consultants to implement and supervise mass surveillance and the establishment of a bounty on reported cases—will be a tragic setback for national programs. Similarly, a large infusion of funds, targeted only for EPI or AFP surveillance and without regard to cost effectiveness, will only produce a short lived and costly system.**

Program Review

UNEPI is planning a program review to occur before the end of the year. The terms of reference are divided into the following categories: *Management; Cold Chain and Logistics, which includes injection safety; Training and Social Mobilization; and Disease Surveillance* (Appendix C). The cold chain portion will be conducted in October 1997, with assistance from WHO and DANIDA.

The number of issues and components outlined in the terms of reference for UNEPI's review, although very important, are too many and diverse to be covered in the usual three week period allocated for EPI program reviews. **UNEPI should review their terms of reference to prioritize and consolidate activities and issues to allow adequate coverage and analysis during the review period. UNEPI should also consider doing the review in segments, as will be done with the cold chain, to allow coverage in greater depth and by the appropriate specialists.** For example, the "management" issues could be covered during one period by management specialists while the "economic" issues could be covered by the appropriate consultant(s) during another period. **Because of the ongoing technical input to UNEPI on surveillance from BASICS and the WHO regional medical epidemiologist in Nairobi, there may be no need to include disease surveillance during the program review scheduled for November 1997.**

Considering the many changes resulting from government restructuring, civil service reform, and donor funding trends toward district projects, the UNEPI review is very timely. UNEPI has asked BASICS for technical assistance with preparations (e.g., methods, terms of reference, questionnaires), as well as to participate in the review.

VI SUMMARY OF RECOMMENDATIONS

The recommendations concerning the review of the USAID grant for EPI are found in the review team's draft report, Appendix B. The recommendations concerning disease surveillance follow.

- UNEPI should continue the revision of their work plan and budget for disease surveillance to include all activities and funding needs for measles and NNT, as well as the district operational costs.

- UNEPI's first priority for establishing disease surveillance should be to ensure that the DHMTs are prepared, both technically and financially, for responding to reports of the EPI diseases.

- More follow up in the districts on their planning for disease surveillance is necessary to initiate more active involvement in surveillance by the DHMTs.

- To meet the global deadline for eradicating polio, donors will have to provide a significant amount of the local operational costs required for investigating AFP cases, in addition to the other costs for developing a surveillance system, such as training, monitoring, and supervision.

- Whenever possible, UNEPI should provide a facilitator during any MOH surveillance-related training to ensure that the EPI-related content is adequately covered.

- As the global deadline for eradicating polio approaches, if the priority of finding every AFP and polio case displaces efforts to establish an integrated and sustainable surveillance system, UNEPI's efforts will be eroded. A repeat of the Smallpox Eradication Programme approach—implanting large numbers of short-term expatriate consultants to implement and supervise mass surveillance and the establishment of a bounty on reported cases—will be a tragic setback for national programs. Similarly, a large infusion of funds targeted only for EPI or AFP surveillance and without regard to cost effectiveness, will only produced short lived and costly systems.

Program Review

- UNEPI should review their terms of reference to prioritize and consolidate the activities and issues to allow for adequate analysis during the three week review period. UNEPI should also consider doing the review in segments, as will be done with the cold chain portion to allow coverage in greater depth and by the appropriate specialists.

- Because of the ongoing input to UNEPI on disease surveillance from BASICS and the WHO regional medical epidemiologist in Nairobi, there may be no need to include disease surveillance during the program review period scheduled for November 1997.

VII FOLLOW-UP ACTIONS

1. The BASICS T.O. for this assignment will continue providing input on the revision of UNEPI's disease surveillance plans and budget through telephone calls.

2. The BASICS T.O. for this assignment will provide suggestions to UNEPI on prioritizing and consolidating the terms of reference for the program review.

3. BASICS will follow up on the procedures for providing technical assistance for UNEPI's program review.

APPENDIXES

APPENDIX A

PERSONS CONTACTED

Appendix A: Persons Contacted

MOH	
Dr. Kihumuro Apuuli	Director General, Health Services
Dr. Sam Zaguma	Director of Health Services, Health
Mr. John F.Z. Barenzi	Acting Commissioner, PHC (Rotary Polio Plus National Chairman)
UNEPI	
Dr. Sam Okiror	Assistant Programme Manager
Dr. Eva Kabwongera	Senior Medical Officer
Dr. Grace Murindwa	Senior Medical Officer
Mr. Tumwine Elly	Senior Cold Chain Technician
Ms. Zaminka Pamela	Cold Chain Technician
Dr. Mugisha Jennifer	Surveillance Officer
Mr. Odonga Jackson	Transport Officer
Mr. Mugisha Frederick	Statistician
Mr. Insingoma Patrick	Training Officer
Ms. Irwasi Betty	Operations Officer
Mrs. Matte R.	Operations Officer
Mrs. W. Tabaro	Operations Officer
Ms. Joy Kakira	Supply Officer
CDD/ARI/IMCI	
Dr. N. Kenya-Mugisha	Programme Manager/IMCI Committee Chairman
Rukungiri District	
Mr. Ntaho Frank	Chief Administrative Officer, Rukungiri District Local Government
Dr. James Mugume	Director of Health Services
UNICEF	
Dr. Ivone Rizzo	Health Programme Officer
Dr. Jessica Kafuko	Project Officer
USAID	
Annie E.N. Kaboggoa - Musoke	Project Management Specialist
Dr. Cecily Banura	HIV/STD AIDS Specialist
WHO	
Dr. A.B. Hatib NJIE	WHO Representative, Uganda
Dr. Stella Anyangwe	Clinical Epidemiologist, WHO/AFRO
CRC - Creative Research Evaluation Centre, Kampala	
Dr. Gimono Womai	
Dr. Tom Barton	

APPENDIX B

REPORT ON USAID/UNICEF/WHO/BASICS TEAM VISIT TO REVIEW USAID SUPPORT TO UNICEF IMMUNIZATION ACTIVITIES IN UGANDA, 29 MAY TO 6 JUNE 1997, DRAFT.

Appendix B

Draft

REPORT ON USAID/UNICEF/WHO/BASICS TEAM VISIT TO REVIEW USAID SUPPORT TO UNICEF FOR IMMUNIZATION ACTIVITIES IN UGANDA

29 May to 6 June 1997

Dr. Al Bartlett, USAID
Alex Palacios, UNICEF
Mark Weeks, USAID/BASICS
Judy Polsky, UNICEF
Dr. Stella Anyangwe, WHO

I. BACKGROUND

USAID UNICEF EPI Grant

Beginning in 1993, USAID launched a major grant to UNICEF to support and strengthen EPI programmes in Africa. Over the past five years, this grant has totaled US$23 million and benefitted 18 countries in Africa, including US$2 million for EPI in Uganda for 1994-1996. The immunization grant to UNICEF was made in the context of the post UCI period, when many countries in Africa were experiencing declines in coverage from 1990 levels, decreasing donor funds for immunization, and difficulties sustaining immunization gains made during UCI. The overarching goal of the grant was to provide critical inputs to attempt to halt coverage declines and to increase the overall sustainability of immunization programmes in Africa. The specific objectives of the grants were to (a) assure the sustained availability of key immunization supplies such as vaccines, syringes, and cold chain; (b) improve systems for planning and management for both programmatic and financial inputs, thereby increasing programmatic sustainability

Since 1992, there have been many changes in the context in which immunization services are delivered in Africa. Over 80% of grant receiving countries are undergoing major health reforms and decentralization programmes, affecting both administrative and budgeting systems within the country, as well as the health sector. In addition, polio eradication activities involving major mobilization of resources and manpower have been implemented in Africa since 1995, presenting both challenges and opportunities for immunization programmes in the region. Thirdly, while 13 of the 18 grant receiving countries have sustained or increased DPT3 and measles coverage levels compared to their 1992 levels, coverage still remains below 80% in most countries in the region, including Uganda. This inability to further increase immunization coverage underlines the need for continued strengthening of national strategies for disease control, immunization delivery, and PHC.

This grant assessment has comprised two parts: (1) a desktop review of the progress of EPI based on indicator data collected by the UNICEF field offices in discussion with MOH counterparts and compiled in UNICEF/NY using a questionnaire developed by USAID and BASICS; and (2) four country visits to gain a more in-depth understanding of national issues (Uganda, Tanzania, Guinea, and Mali). The country visits were undertaken by a team comprising UNICEF, USAID, WHO/AFRO, and USAID/BASICS.

II. TRIP ACTIVITIES

The five member team visited Uganda between May 29 - June 6th, 1997. Discussions were held with UNICEF/Kampala, Ministry of Health, Ministry of Local Government, UNEPI, WHO, USAID mission, and ODA/UK. Field visits were made to two districts (Kiboga and Rukungiri) to meet with district and subcounty technicians and administrators. The team also met with a Parish Development Committee in Kiboga District and visited two health centers, one in each district. Appendix A lists the persons met.

III. OBSERVATIONS and RECOMMENDATIONS -- SUMMARY

The Team's visit was short and did not attempt to make a full review of the EPI or the grant. However, the Team learned of critical issues which not only affecting the MOH and UNEPI, but also future donor assistance to Uganda.. The following summarizes the Team's observations with suggestions for further strengthening immunization services in Uganda. Most of these suggestions reinforce the strategies and ideas of those met during this visit. While the following are listed separately for convenience of presentation, it is important to realize that all of these topics are interrelated.

UNEPI Management

NIDs, decentralization, integration of programme functions, and the need to improve disease surveillance have greatly increased, and in some ways, changed the work of UNEPI. Decentralization and the donor trend to support district health care systems, as opposed to concentrating on national programs, reorientates UNEPI's role more toward supporting districts, coordination, and ensuring quality. As a result of these changes and increased workload, efficient management has become even more crucial.

UNEPI's central management and management functions should be reviewed as soon as possible and adapted according to rapid changes due to decentralization occurring within Uganda and the MOH. This will require a redefinition of roles and responsibilities as well as time management. To facilitate an in-depth review of specific programme areas, the team raised the possibility of conducting smaller reviews on specific parts of the EPI programme rather than one large programme review. Breaking the review into pieces would increase the likelihood of getting the right technical assistance and personnel involved from outside Uganda and would also allow teams to focus on improvements needed in specific areas.

Staff Training

Based on discussions and the reports reviewed, the quality of immunizations services and the cold chain still need improvement, especially at the health unit level. The planned expansion of immunization sites also requires more well trained health workers and supervisors. Although providing immunization services requires considerable technical knowledge, such as the cold chain and steam sterilization, the time and frequency of EPI training is currently not adequate through integrated and decentralized training which has reduced the time available for immunization. The MOH should review how best to improve the quality of immunization services through the existing training mechanisms and how to train new staff. All opportunities for reinforcing classroom training, such as on-the-job training during supervision or routine refresher sessions in the districts, need to be explored. It appears that UNEPI should continue its major role concerning technical training on immunizations.

Monitoring & Supervision

The emerging structures and donor support at the district and community levels provide new opportunities for establishing more effective monitoring in the districts. However, the variety of projects and strategies in the districts creates a potential for inconsistency and inaccuracies in district and community monitoring and MIS systems.
UNEPI needs to ensure that proper and consistent indicators are used in all districts to monitor immunization coverage, as well as disease incidence.

As with training, effective supervision of immunization services through an integrated approach requires skilled supervisors with practical experience. The increase in contact with health units through the MOH efforts to improve supervision provides greater potential for reinforcing the training given during workshops by giving on-the-job training during a supervisory visits. More frequent supervisory visits also provides opportunity for improving the monitoring of immunization services.

Supervision and training should be interrelated. Supervision should be used as a mechanism for continuous training through on the job training, as well as a means for assessing the quality of training workshops and future training needs.

Disease Surveillance

Decentralization and Community Capacity Building provide considerable potential for improving awareness of EPI diseases and for case detection. However, districts still seem to view surveillance and disease control as a central function. Districts currently lack the resources and skills to investigate and respond to AFP, polio, NNT, and measles outbreaks.

The intense global focus on polio eradication will emerge in the next two years as a critical component of the global polio eradication initiative. Donor funding for surveillance will increase. Uganda is in a strong position to begin promoting community participation in their surveillance system due to the opportunities presented by decentralization. UNEPI is in a lead position to develop surveillance methods that will benefit other African countries as well. A strong surveillance system will also reinforce the decentralized planning process by providing districts with information and feedback for planning PHC activities and strategies. UNEPI has a good opportunity for developing an integrated and sustainable surveillance system before the global pressure of detecting cases might surpass the priority of establishing an effective system.

In view of the probable increase in resources and the increasing community potential, UNEPI should continue its effort to explore all potential strategies and resources for disease surveillance, such as the Parish Development Committees, and should include in their budget all needed inputs for establishing an effective, sustainable, and integrated disease surveillance system.

NIDs

UNEPI and District staff want to link polio eradication with the development of routine immunization services. For example, funds available for polio eradication for social mobilization could also be applied to promote routine immunizations and disease surveillance. More guidance and thought are required on how to utilize polio eradication activities for improving routine services.

NIDs have required a tremendous amount of staff time at UNEPI which has not only greatly increased working hours beyond official business hours, but also has diverted time away from routine matters. For example, the time lag for issuing the quarterly immunization report has greatly increased. As noted above under Management, more efficient time management is needed to reduce diversion from routine management activities created by NIDs. In addition, UNEPI and future reviews, such as the proposed program review in November, should carefully examine the effect of NIDs on the management and operations of routine immunization, as well as other health services.

NIDs demonstrated the use of local support for delivering immunizations. The benefits of NIDs through local contributions and support need to be carried over to the routine services as well.

With regard to NIDs, donors need to make a greater effort to make firm commitments in advance, even if funds are not forthcoming until later, so that national planning and preparations can proceed without constant budgeting, and so that staff time can be more efficiently directed towards program implementation

Increasing Coverage

New strategies are needed to increase immunization coverage and to reduce drop out rates. Again, the decentralization and community capacity building processes provide opportunities for achieving better coverage. For example, the community registers can be utilized for tracing immunization defaulters and for promoting community competition for achieving 100% coverage. Operational studies, both past and future, should be utilized for developing strategies for increasing coverage and reducing drop out rates.

Districts and Community Capacity Building (CCB)

Decentralization to district, subcounty, and parish levels has occurred at a very rapid pace and before adequate management could be established at the these levels. Nevertheless, the efforts to involve the community in the planning and management of health services provides tremendous opportunities for improving on the utilization and sustainability of EPI and other health services. Strengthening the CCB process should help contribute toward ensuring that the necessary EPI activities are carried out.

One example of the capacity being built in some districts is the training of PDCs to collect basic demographic data in the villages, and storing such data in parish registers. This development, raises important issues. (1) The tools and methods used by the PDCs need to be standardized to ensure correctness and comparability of the data collected among the many different parishes. These data could become a reliable source for EPI. However, the information collected kept must be useful both to the community as well as UNEPI. (2) Although the sectoral reforms, integration, and decentralization provide new opportunities for EPI, care must be taken to avoid overburdening PDCs or other community efforts with complex data collecting requirements, which would also reduce the validity and reliability of the data.

Donor Support

Donors need to consider supporting immunization through broader activities. For example, investing in line items for "child survival" rather than strictly "EPI" will reinforce synergies between integrated service delivery, planning, supervision and management systems at the district, sub-county and parish levels.

Decentralization has increased the need for new capabilities at all levels, including the central level. Donor support for community capacity building, and improving data collection, planning, monitoring and evaluation skills at the sub-national levels could also have important benefits for immunization delivery and surveillance systems. For example, providing funds to promote building capacity in communities to participate in planning, managing, and monitoring health services could filter upwards to ultimately improve the national EPI program.

When requesting broader applications for donor funding, UNEPI and the districts need to provide clear information on how the investments in capacity building will improve services and the indicators which will measure the ultimate impact on services or child health.

IV. Uganda : Overview of EPI

Uganda borders Sudan to the North, Kenya to the East, Tanzania to the South, Rwanda to the South West, and Zaire to the West. The country is divided into 39 districts. According to a projection from the 1991 census, the population is approximately 19 million. The population is expected to double after 28 years. Uganda's national debt amounts to $3.4 billion, or about $114 million annually. Eighty per cent of the country's export earnings go toward servicing this debt. While Uganda's national debt equals $16.70 per capita, Government of Uganda (GOU) spending on health amounts to only $3 per person. Private sector spending on health care is estimated at $4.91 per person. The World Bank estimates that at least $12 per person is necessary to provide adequate health care in Uganda. Donors contribute 70% of the government's health sector costs.

The Uganda Ministry of Health began to provide immunizations on a national scale in 1963 with a nationwide mass immunization campaign against poliomyelitis. During the late sixties the MOH conducted mass campaigns against cholera and smallpox. By 1973, 70% of the children below the age of 14 years were reportedly vaccinated with BCG. Uganda was one of the first countries in Africa to eradicate smallpox. However, after the ensuing decade of civil unrest, BCG coverage fell dramatically to nearly 1% by the early 1980's.

To revive immunization services the Ministry of Health launched its Uganda National Expanded Programme on Immunization (UNEPI) in 1983 with support from UNICEF, Save the Children Fund (UK), and WHO. Due to a devastated health care system, a phased approach for implementation, and continuing instability, progress was not obvious until the latter part of the 1980's. By 1987 immunization services were available in all districts, although some areas still lacked services due to continuing pockets of insecurity. The improved security and dedicated efforts of UNEPI produced remarkable gains. In 1991 Uganda ranked among the top ten countries in the world for improving measles immunization coverage, increasing national coverage from below 40% in 1986 to 78% by 1990. However, since the early 1990's UNEPI has not been able to significantly increase immunization coverage beyond this level. According to the 1994 UNEPI Programme Review major obstacles against increasing coverage include: a very high drop out rate, poor communication between health workers and mothers, and the absence of monitoring at district and health unit levels.

UNEPI has always had strong political support, as well as substantial donor financial and technical support. Since 1983, nearly all funding for cold chain and vaccination equipment, vaccines, transportation, and other operational expenses have been provided by UNICEF through multi-lateral aid. Beginning in 1994, the Government began financing vaccines. UNICEF also dedicated a Project Officer who worked full time on UNICEF's EPI activities until 1994. In 1994 this position became integrated with UNICEF's other health project areas, such as CDD, ARI, and community capacity building. UNICEF continues to be a major supporter of UNEPI.

Since the early 1980's SCF (UK) provided long term technical advisers to UNEPI in the areas of: program management, the cold chain, central and district operations, and disease surveillance. As

UNEPI's capacity increased, this support was gradually reduced and finally completed when the epidemiologist left at the beginning of 1995. Between 1990 and 1993 the Canadian Public Health Association provided funding for EPI operational expenses in the districts.

In 1994-95 the Government of Uganda significantly increased funding for UNEPI by financing the purchase of measles vaccine from the national budget, and also DPT in 1996. The Government plans to finance all routine vaccines by the year 2000 and has signed a vaccine independence plan with UNICEF. District administrations have also begun contributing by paying for operational expenses such as kerosine for steam sterilization.

Over the past five years, major changes have occurred in Uganda which have implications for delivering immunization services. Changes in the national context include: decentralization of government, including budgets, to the districts and recently to the sub-counties, civil service restructuring which has reduced the staff available for delivering immunization services; introduction of an integrated approach to the general health service delivery; new programmes and projects which may have overburdened district health staff, and increased potential for community participation through the efforts to establish Parish Development Committees. In addition to these changes, the implementation of national immunization days for polio eradication (NIDs) have required significant amounts of staff time at central and district levels, thereby increasing demands on staff and management at all levels.

V. Immunization in a changing sectoral context: Decentralization

One of the major issues brought into focus by the Uganda experience is how to provide -- and for international agencies and donors, how to support -- effective immunization in the face of major health sector reorganization and decentralization. This became one of the main areas explored by the team during their visit.

The decentralization process. The Ugandan government is strongly committed to, and has undertaken in earnest, a process of decentralization and devolution of government functions. This is not a reform process limited to the health sector; it is a true reorganization of government, with health services and functions inevitably and completely involved in the process.

Unlike some countries, Uganda appears to be committed to decentralization not only of responsibility and even of authority, but also of resources. In principle, a substantial portion of the government's budget is to be apportioned directly to districts in the form of grants. Some of these grants are "unconditional" block grants, with allocation determined by District Councils; others are "conditional", that is, contain earmarks for funding in areas agreed upon between the districts and the central government. To date districts have been transferred the recurrent budget (much of which in the health sector is actually in the form of drugs, equipment, and commodities or for non-discretionary categories such as salaries). The government has reportedly also decided that the development budget (which involves a greater amount of discretionary and cash resources) should also be devolved within the next year. In addition, tax revenues collected in

each district remain at the district level, with 65% remaining at the sub-county level and 35% to be remitted to the district level.

The decentralization and devolution process appears to be driven by the government's principles of empowering the population, increasing the participation of the people and their local representatives in decision-making and control of resources and activities, and increasing transparency and accountability. The process builds upon the local governance approach and structures developed during the resistance movement in which the president and key members of the government were engaged before their ongoing decade-long roles as the country's leaders. Therefore, while Uganda's decentralization involves significant changes in how essential health services are managed, the process is not one primarily based on considerations of improving management. It therefore raises issues for immunization and other essential health services of how management effectiveness will be maintained and even improved in the process.

There appear to be several important characteristics of the decentralization process as it is being carried out in Uganda:

- The government has decided to carry out the process in a rapid, deliberate, and pervasive way, rather than through a more piecemeal or tentative approach. Implicit in this approach is the recognition that not all processes are fully worked out and not all problems that will result from new roles and responsibilities have been foreseen.

- Despite these uncertainties, it is clear that substantial thought and planning have been dedicated to implementation, evaluation, and improvement of the decentralization process.

- There is strong commitment to the process, resulting in tolerance for risk taking and for problem detection and resolution. This supportive environment allows for solutions to be developed and capacity to be built in the process of implementation.

The Government of Uganda believes that decentralization can ultimately improve access to and quality of essential services, including health services. This is in part through resource generation, since local governments now have the authority to supplement national budgetary funds with locally raised revenues (in the health sector, this includes the potential of cost-recovery and insurance schemes, which are being experimented with in some districts). In addition, the government believes that decentralization will contribute to increased transparency, greater involvement and "ownership" in essential services by the population, and greater accountability to the intended beneficiaries on the part of those managing and delivering services.

Roles under decentralized government. To date, decentralization appears to have been most substantively carried out by shifting of authority and responsibility to the district level outward. The structures and roles of more peripheral elements of the system are partly worked out and operational, with further definition and implementation in progress.

Figure 1 (copied from the Health Programme Plan of Operations) depicts the intended management structure for the health system. At each level of the system from the district outward there are political institutions, management institutions, and technical (health services) institutions. The following is the team's present understanding of the organizational entities and responsibilities that are intended for the different levels from the district outward.

Districts (LC-5). At the district level, the political institution is the District Council; this council has an Executive Committee and specialized interest committees with oversight of such areas as public health. The technical entity is the district medical team, headed by the District Medical Officer (DMO), who has overall responsibility for implementation, administration, and management of health resources and programs in the district.

Legal authority: The District Council is the highest local political authority and has executive and judicial power; their powers are limited by national law, but within their mandate they may pass and enforce ordinances. Districts may exclude national government intervention in areas within their mandated areas of authority. Districts have authority to enter into agreements and contracts with private sector organizations; they are also apparently empowered to negotiate directly with donors and international agencies, and this has been done in the case of the USAID "Developing Improved Services for Health" Project.

Resource allocation: The District Council has authority and responsibility for developing budgets and allocating budget resources (both from national government and from locally produced revenues).

Planning: The District Council is the planning authority for the districts, incorporating inputs from more peripheral levels.

Budgeting: The DMO oversees preparation of a health budget and advocates for this budget before the District Council and its committees; the budget is intended to incorporate input from more peripheral levels and include locally generated funds as well as central government grant funds.

Administration and personnel: All government personnel from the district level outward, including health personnel (even the DMO), are employees of the district government. Administration is principally by the DMO, except for matters of oversight of locally generated resources, in which the health management, or health unit management, committee has a role. Hospitals also have hospital administrators.

Technical management, supervision, and quality control: These are functions of the DMO and the technical health team, and include training, supervision,

performance assessment, monitoring and evaluation (including indicators of utilization and coverage), and surveillance and disease control.

Service delivery: This is the responsibility of the DMO and the health team; services are intended to respond to national priorities, policies, norms, and guidelines established by the central Ministry of Health, and to local needs and priorities identified through the political entities at the district, subcounty, parish, and even village levels.

Logistic support: Logistic and supply support and maintenance and repair functions are the responsibility of the DMO and technical team, utilizing both drugs, supplies, commodities, equipment, and parts received directly from the central government (as part of recurrent budget). Technical capability for maintenance and repair is intended to reside at the district level.

Sub-counties and health units (LC-3). Sub-counties have councils, which are -- like District Councils -- elected political bodies; they have local authority to enforce ordinances, and also to oversee revenue generation at this level. The technical units at this level are one or more health centers. There is a sub-county health management committee (whose function is not yet fully developed and which in many areas apparently does not yet exist). In addition, for health units -- especially those involved in cost recovery -- there is a health unit management committee.

The political and management entities at this level have substantial responsibility for priority setting and planning, including planning of health services; they also provide local input (including that from parishes and villages) into the district planning and budgeting process. Concerns about the nature and quality of services and other matters related to the technical system could be negotiated directly with the service provision unit at this level, or back through the political system to the DMO level.

In addition, the sub-county level is given an important resource management role: of local revenues generated under decentralization, 65 per cent are to be retained and managed at the sub-county level (of which the sub-county will allocate 25 per cent to lower levels and 10 per cent to counties), with only the remaining 35 per cent passing to the district level. Therefore, the sub-county political and management entities will have an important degree of resource allocation control, attendant influence and oversight, and management responsibility for the health service delivery units. There will be additional financial oversight where health centers themselves are directly involved in cost recovery.

In addition to service delivery, health centers will be responsible for providing input regarding needs for drugs, equipment, supplies, and commodities, and potentially regarding resource requirements for such activities as training more peripheral groups, health education, community relations and situation analyses, and outreach. Health

centers will have partial responsibility for training of more peripheral groups, community mobilization and interaction, and outreach activities.

Parishes (LC-2) and villages (LC-1). Political and management entities at these levels reportedly still do not exist in many areas; however, these levels are apparently intended to be important functionally, especially in the case of the Parish Development Committee. Political and management functions at this level are apparently analogous to those of the sub-county level counterparts, providing with local priority setting, planning, resource allocation, and management authority. They also provide input on priorities and planning up through the political and management systems, and represent their communities in interactions with the service delivery units. Funds will be generated or received at these levels for health activities.

Health delivery units and activities at these levels include principally outreach activities and services provided through community health workers and traditional birth attendants. These may be of substantial importance in relation to immunization and other women's and children's primary health services. Parish Development Committees are reportedly responsible for organizing immunization sessions.

The role of central government. The functions devolved to the district level and below obviously result in major and fundamental changes in the role of the central government, and specifically of the Ministry of Health. Under decentralization, the central line ministries no longer have control or responsibility regarding planning, budgeting, service delivery, training, and other basic implementation functions. Instead, the central Ministry of Health is now charged with establishing national policies, priorities, norms and standards; assurance of quality of services; development of generally required tools such as training curricula; monitoring and evaluation through aggregate data (including MIS) and special surveys; national surveillance; and coordination of special national initiatives (such as Polio Eradication and Integrated Management of Childhood Illness).

Fortunately, Uganda has reportedly determined that these cross-cutting functions should be carried out by preserving the identity and technical expertise of its specialized units, such as the EPI unit ("UNEPI"). These units will participate in each of the cross-cutting responsibilities of the Ministry, and will work in teams to integrate their inputs as appropriate and required by the decentralized approach. This approach by Uganda differs from that of some countries, who have substantially eliminated their central technical expertise and retained only cross-cutting groups that are "jacks of all trades and masters of none." For health services such as immunization -- where incorrect vaccine handling or injection technique can negate the whole investment in immunizing a child -- it is essential to maintain and engage this central technical expertise and to apply and transfer it in the districts and more peripheral levels.

In addition, the central government will retain responsibility for functions that logically need to be centralized, including vaccine and other procurement functions (based on requirements determined by the districts).

Finally, the central government maintains some influence over budget priorities, in negotiations regarding "conditional" grants to districts. How this will be applied in the health sector is under discussion.

The interaction of Uganda's decentralization with immunization. Table 1 presents the team's understanding of how the functions carried out by the different levels relate to key elements of the effective immunization of women and children and of control of vaccine preventable diseases.

It is clear that this governmental reorganization presents important new challenges to effective immunization and disease control. At the same time, decentralization potentially offers opportunities to increase real community demand and support for essential health services, improve access and coverage, mobilize local resources, improve information on health status of the population, and overall, increase institutionalization and sustainability of immunization and other essential health services.

Responding to the challenges, problems, and opportunities generated by decentralization will obviously require the strengthening of capacities at all levels to assume their new roles and responsibilities. At the district and lower levels, this capacity strengthening will need to include technical areas of essential services, as well as planning, management, identification of priority areas, and advocacy for resources. It will also require monitoring of key indicators of health outcomes, to keep the process focused on its intended products.

Challenges and problems for immunization, and relevant observations from the team visit. The following are some of the challenges for immunization identified by the team during this visit, as well as some of the information and observations made by the team itself. These are obviously limited by the duration of the visit and resultant incompleteness of insight we could develop. Additional relevant observations are contained in UNICEF's annual programme report for 1996 (reviewed in draft during the visit).

> **1. Priority setting and resource allocation.** In the past, the priority given to immunization was substantially determined by central government MOH decision-making and budget allocation decisions. This central priority setting and resource allocation process in support of immunization was substantially supported by UNICEF's influence and financial and supply (vaccine, supplies, and equipment) inputs using general resources and supplemental donor resources. Uganda itself has demonstrated substantial high level political commitment to immunization, manifested in its decision to initiate purchase of a substantial share of its routine vaccines.

Under decentralization, the priority given to immunization -- as to any other component of primary health care, and to primary health care itself -- will now be determined at the levels of the thirty-nine districts, and in part at the more peripheral levels in each of these districts. To maintain and increase effectiveness of immunization, adequate human and financial resources will have to be provided by districts and to some degree by other levels. Priority will have to be given to capacity building for immunization, and time and effort provided to carry out such essential activities as outreach.

One challenge to immunization is clearly that in this priority setting and resource allocation process, immunization must compete with other health services and activities, and even with other program areas beyond health. Thus, at each level it will need to survive the political process that in many countries favors curative care over preventive and health promotive services, infrastructure (hospitals and clinics) over services, and other sectors (such as road building) over health. As the process evolves, there may be claims made on resources by local political imperatives (Tip O'Neill, former Speaker of the U.S. House of Representatives: "All politics is local.") that may reduce resources available for immunization.

A second challenge is that the decentralization scheme makes immunization and other health programs partly dependent on locally generated resources and on shares of the central resources allocated to districts. When these resources are lower than expected -- as has been the case in Uganda at both levels -- there are likely to be shortfalls for immunization services.

Observations from the visit. In Uganda, the assignment of priority and resources to primary health services, and specifically of immunization, are in part supported by the central government's own stated priorities. These priorities are intended to provide the framework for budgeting by districts. In addition, health activities may be partly protected by inclusion under "conditional", as opposed to "unconditional", block grants from the central government to the districts (however, this raises concerns about the effects, and politics, of establishing "earmarks" within the budget). The full effect of budget decentralization may not be seen until the development budget is shared (planned to happen within two years); at present, the central government has devolved only the recurrent budget -- much of which comes to districts in the form of predetermined supplies (including drugs, vaccines, supplies, and equipment) and salaries for district and other personnel (including health personnel).

The team's collected information and observations suggest that the experience to date in Uganda has been mixed, but is hopeful. Districts visited did make clear that they take seriously the national priorities and apply them as the framework for their resource allocation. In addition, in Rukungiri District, both health (district medical) and political (district administrative) officers demonstrated clear awareness of the need to preserve the priority of immunization and other preventive services, and of the resulting need to

sensitize more peripheral levels in this regard. It is likely that the efforts of UNICEF in these districts substantially contributed to this awareness. On the other hand, there were also reports of some districts not implementing the national guidelines, and even of diverting funds intended for health under "conditional" grants to road building and other non-health activities. One donor, and UNICEF itself, observed that as donor funds were provided to districts for specific primary health activities, these funds did not supplement the budget for those activities; instead the donor funds were used in place of national or local funds for the health activities, resulting in shifts of national and local funds to other parts of the districts' budgets with no net increase for health ("displacement").

In addition, as mentioned, shortfalls in both national and local revenue generation were experienced last year, resulting in across-the-board reductions in central allocations; districts and other officials observed to the team that these shortfalls had definitely affected immunization and other health activities. At present, districts appear to be depending on UNICEF to make up shortfalls for immunization and other key health activities. However, in these circumstances the "displacement" phenomenon described above is likely to occur.

2. Coverage. Decentralization, and the resultant changes in decision-making, resource allocation, and implementation responsibilities, potentially represent a challenge to maintaining immunization coverage. This is particularly challenging in the face of DHS data that reveal lower coverage levels than those identified by national service statistics, and of the reality that some districts further from Kampala experience substantially lower than average coverage.

As the implementation of immunization passes from the MOH (UNEPI) to districts, both the monitoring and the maintenance of coverage will have to become routine features of health services in all of the thirty-nine districts. The central MOH obviously has an important supportive role to play in this, through the implementation of an HMIS that includes coverage indicators, supporting the districts in determining coverage, and helping develop effective approaches to maintain and increase coverage.

Observations from the visit. UNICEF and UNEPI observed that coverage had already "plateaued" during the last several years. The WHO representative indicated that during the first year of decentralization, actual drops in coverage were identified in some districts. On the other hand, UNICEF reports that sensitization of communities has actually resulted in increased awareness of coverage levels, and resultant increased demand and local organization for immunization outreach. Districts visited had been sensitized to immunization coverage as an important health indicator, and expressed the intention to work with more peripheral levels to promote and monitor coverage.

3. Quality of immunization services. Like all countries in the region, Uganda recognizes that there is need to improve some aspects of the quality of immunization services

delivered. The British ODA evaluation of immunization services in the country identified specific examples of deficiencies in immunization practice, equipment maintenance, cold chain maintenance and record-keeping, and vaccine handling. At the same time, the report expressed overall confidence that Uganda's immunization services were of reasonable quality and that with appropriate inputs could continue to improve.

The changes under decentralization will somewhat complicate this process. For one thing, the districts will no longer maintain the previous specialized category of "vaccinator"; instead, immunization will become one function of multivalent health workers. This step is undoubtedly necessary for sustainability in any case. The challenge will be to develop, reinforce, and maintain all the technical skills required in these workers to handle vaccines, manage and monitor the local cold chain, practice correct and safe immunization, and conduct effective outreach. "Operating Level" health worker training developed by the MOH, incorporating inputs from UNEPI, will partly address this challenge. However, technical quality and actual implementation of effective "support supervision" by the district health team will clearly be required. Since this team itself is also multivalent, it is not clear how well they can supervise the essential individual technical components of immunization by health workers. The development of "mid-level training" is intended to partly address this issue. However, districts themselves identified the need for technical support and supervision by the central MOH (UNEPI) to address quality issues.

Observations from the visit. The team was unable to gather much direct information regarding quality. In the visits to health facilities, some deficiencies in record keeping were noted, and interviews with health workers suggested practices that could result in missed opportunities because of limited times for immunization and concern about vaccine wastage that might prevent immunizing children at other times (this could also be a policy issue). Perhaps the most important information collected was that both districts and UNEPI were aware of the importance of quality improvement, and that this is one of the new central functions assigned to MOH technical units like UNEPI. The challenge remaining will be how to develop the skill and capacity to carry out this function, both at the central and district levels. The WHO Representative expressed the opinion that reorganization and technical assistance could contribute to increasing central (UNEPI) capabilities to carry out this new function. Training for districts in supervision and quality control are just beginning and their effectiveness cannot be assessed for some time. Thus, this will remain a key area for continued monitoring, evaluation, support, and possibly innovation.

4. Planning and needs forecasting. Under the previous centralized system, planning for immunization activities and need forecasting for vaccines and other supplies were carried out in consultations among UNEPI, UNICEF, and district medical officers. The process was relatively streamlined, and really coordinated from the center. Now, planning starts at the district level, and ultimately plans are supposed to be developed at more peripheral

levels as well. This new process will require strengthening the ability of these levels to plan, and a more facilitative role for UNICEF and UNEPI.

Observations from the visit. The districts visited were sensitized to the importance of planning as one of their principal functions; they generally acknowledged that they had much to do, and would require substantial support, in becoming effective in the planning process. They also accepted their role in helping more peripheral levels become competent in planning, once they themselves had improved their own quality. Thus, the sense of importance and responsibility for these functions were well established, implying a readiness to receive the support and technical inputs that will be required.

Opportunities for improving immunization through decentralization. UNICEF and the government of Uganda are confident that decentralization will ultimately improve coverage of immunization and control of immunizable diseases. There are a number of ways that this is likely to happen.

Increasing coverage through community involvement. If communities are sensitized to immunization, they can provide organization, resources, and information that will help reach families previously unreached. Uganda maintains that it would be difficult to surpass present coverage levels without such decentralized involvement and support. Success in this endeavor could contribute to lasting improvements in coverage and sustained demand.

Improved information (including coverage and surveillance). The involvement of communities in gathering information on health status indicators like immunization coverage, as well as on the occurrence of important diseases, could be a key to strengthening these essential functions. In Africa, it is clear that effective disease surveillance will need to incorporate both facility and community elements. Thus, the development of community information processes that ultimately provide coverage and surveillance information, and that are effectively linked to more formal health information system, may prove to be a major contribution to a model that works for the Africa region.

Innovative approaches. Once communities and localities internalize immunization and other key health interventions as priorities, it is likely that they will develop their own approaches to making these interventions happen. To do this, they will need flexibility, technical advice, support from the health system (health worker inputs, outreach activities, vaccines and supplies), and ways to evaluate their own interventions. For such innovations also to benefit other communities, the health technical team and organizations like UNICEF should help document and transfer approaches that contribute to improved implementation.

Resources. Some of the innovations developed by communities may solve service delivery problems at low cost (examples of low cost community registration of information that was considered unobtainable by health authorities without substantial investment were reported to the team during the visit). In addition, despite present shortfalls, it is likely that communities and local governments will actually mobilize additional resources for services they feel to be essential and of good quality.

The importance of UNICEF in the process. In Uganda, it is apparent that UNICEF is playing an important role in keeping the process of decentralization focused on key issues related to the health and well-being of children and their families. UNICEF is helping Uganda both in responding to the challenges and in taking advantages of the opportunities to sustain and improve immunization and other essential health services in the decentralization process.

One example is seen in the districts where UNICEF's sensitization and collaborative approach with district officials has paid off in improving quality of planning and in keeping appropriate health interventions among the recognized priorities. Another is the national programme and implementation plan, which links the process of capacity building and development of new processes at the different levels to indicators of key health outcomes and ultimately to the national Plan of Action for Children (in fact, UNICEF is beginning the development of district level Plans of Action for Children).

Monitoring of the process, detection of "drift" and of problems, and continuing advocacy for children and families at the different levels will be as important as resource and technical inputs as this process continues. It is clear that UNICEF is playing an important role in carrying out these important advocacy and support functions to Uganda in the process the country itself has initiated.

The need for technical capability. It is clear that Uganda will require more than just vaccine and material support as it goes through this radical change and as different levels of civil society and the health system take on new functions. During its visit, the team clearly heard -- from international organizations and donors, central government, districts, and even community representatives -- identification of needs for technical support in key areas. These include technical aspects of immunization delivery; planning; development of new MOH capabilities in supervision, quality improvement, and monitoring and evaluation; and development of community-based approaches such as CBMIS. Such technical assistance and support will be required at all levels, including the central level.

For this reason, the team wishes to underscore the importance of assuring the availability of the technical capabilities that will be required in this process. This implies that the present technical capabilities of UNICEF -- which have thus far been essential in the process -- must be maintained.

In addition, complementary technical assistance and support, beyond the capabilities of the country office, are likely to be needed. These inputs might be provided from a number of sources. One could be from the UNICEF regional office, which would logically provide such technical assistance to the country in support of the local office under UNICEF's new management approach. Doing so, however, might require strengthening relevant technical capabilities in the regional office itself, and certainly strengthening the operational relationship between that regional office and the country office. Other potential sources of technical assistance might be WHO (in part, drawing on capabilities supported by complementary USAID regional grants to WHO/AFRO), and/or USAID technical assistance projects such as BASICS. Technical assistance provided to Uganda by BASICS in planning and evaluation of polio NIDs has demonstrated that this model of complementary technical assistance, alongside UNICEF's and other donors' technical and financial inputs, can be successful.

X. Implications of the Uganda experience for USAID support of immunization in Africa.

1. Continued need. The Uganda situation clearly indicates that while there has been substantial progress made in immunization, there is also continued need for support from donors and from UNICEF. The country demonstrates competence, commitment (both political and financial), and accomplishment. However, the basic job of improving quality, coverage, and sustainability of immunization and other basic health services for women and children is clearly not done. At the same time, support and assistance are also required to make sure that these basic services successfully pass through, and actually benefit from, the reform process that Uganda and many African countries are engaged in.

As a Band A country, Uganda will require continued external support for both vaccines and implementation, although it is hoped that continued assumption of responsibility for immunization as well as vaccines will occur. In addition, Uganda will clearly require advocacy and technical support. UNICEF and its partners, including USAID, must acknowledge and respond to these continued needs if immunization in Africa is to be expanded and sustained.

2. The role of the USAID grant in Uganda's program: implications for USAID's funding strategy. Analysis of the role of USAID's funding in the Uganda program raises some fundamental questions for USAID that it needs to answer in consultation with UNICEF.

While exact figures were not available, UNICEF indicated to the team that the total of its assistance to immunization in Uganda averages $2.0-2.5 million annually. During the period January, 1995-March, 1997, UNICEF called forward a total of just under $1.4 million, equal to an average of roughly $600,000 in each twelve months. At the same time, other donors have provided substantial support to immunization through UNICEF: for example, British ODA has contributed over $1 million annually for the past several years.

Analysis of the actual utilization of USAID funds (as identified in the draft 1996 Annual Report of the Health Programme, provided to the team during their visit) shows that of the $1.39 million

called forward, almost $960,000 (69 per cent) was expended on supplies; of this amount, over $680,000 was for routine vaccines, just over $36,000 for cold chain equipment, and $20,173 for a vehicle for the UNEPI program. Of the portion of grant support provided as cash assistance, just over $120,000 was spent for salaries and costs of UNICEF personnel who support EPI and other health activities in multiple districts; roughly $166,000 (39 per cent of cash assistance, and 12 per cent of total funds called forward) were for EPI specific implementation activities, and another $90,000 (21 per cent of cash assistance) was spent for cross-cutting capacity building activities such as Operational Level training, improving supervision skills, and promoting positive behavior.

None of these expenses is inappropriate for the Africa EPI grant. However, the nature of these expenses, and the magnitude of the USAID funds alongside other funds for immunization through UNICEF, underscore an important distinction: the USAID grant funds clearly provided support to a country whose immunization program was aiming to improve capacity and sustainability; however, it is unlikely that these funds had substantial influence on the nature of the country program's activities. In essence, the USAID funds became one source of supplemental funding for a program that -- in the case of Uganda -- was concordant with the purposes of the grant; but the grant did not leverage the program. The same analysis in other countries might be important in understanding the extent to which the grants actually contributed to the nature of immunization programming in the countries where it was applied.

This analysis also raises another, more basic question for USAID. The draft Uganda Annual Report identifies the following "Issue within the Health Programme":

> "The intention behind giving financial and logistic support to the districts is to supplement, but not become a substitute for, the district's' own resources. However, in many instances this assistance has encouraged districts to allocate their resources to other sectors."

This same issue applies to USAID's funding to immunization through UNICEF. In Uganda it appears that UNICEF is committed to maintaining financial and supply support to immunization, through a combination of general resources and supplemental funding as available. If USAID funding does not increase funding for immunization, but simply meets supplemental funding needs in the area of immunization, this sets up the same funding situation that UNICEF/Uganda finds to be an issue in the case of districts: UNICEF general resources and other donor resources then go to support other activities, in health and potentially in other sectors.

These other activities are also undoubtedly worthwhile; so the issue for USAID is the intention of its funding.

At the macro level, the U.S. provides $100 million annually to UNICEF general revenues; these funds now come from the same "Child Survival, Infectious Diseases, and Basic Education" account as USAID's Child Survival budget. If USAID then contributes additional child survival

funds for immunization or other child survival interventions in the form of "supplemental" funds, but this additional contribution results in no net increase, but rather in a shifting of general funds to other activities, the effect is no net gain for immunization. If the general or other donor resources actually move to support activities in other sectors, the net result would be an actual decrease in funding for child survival (since the USAID funds could be programmed in another way that would be additive to child survival programming).

This analysis suggests that USAID, in consultation with UNICEF, should develop clear criteria for support of immunization or other child survival programming in a particular country, or regionally, through grant support to UNICEF. Such criteria might include:

- Identification of a true gap in funding for the child survival activities (that is, neither general or supplemental funds from other sources are available and the activity will not happen without USAID support).

- Intention by USAID to support specific areas in a country which it considers priority, and where support through UNICEF (rather than through bilateral field mission activities) is the most effective way to do this.

- Agreement among USAID, UNICEF, and perhaps other partners, that a particular country offers a chance to work out important child survival programming issues; if the proposed activities are already included in the country program plan, USAID would have to decide whether it was appropriate to simply provide supplemental funding. If the activities were additional, USAID and UNICEF would have to agree on the nature of the activities and ensure that funding for them was additive, not substitutive. If the purpose of supporting these innovative activities were to evaluate and document the results and share them with other countries, additional support might be specified for this process.

- Support for activities that would add value to existing country programs; an example might be supporting development of specific capabilities or activities at the regional level, in the way USAID/Africa Bureau has with WHO/AFRO. Ideally, UNICEF would consider assuming support of regional capabilities if they were agreed upon as priority, once USAID funding had supported their development and demonstration of their value.

In all cases, it seems clear that arriving at such agreement on intention and utilization of USAID funds will require consultation and negotiation with the specific country or countries (or regional office, if appropriate) as well as with UNICEF headquarters. This would appear to be the only way to assure common objectives in the application of USAID child survival funds through UNICEF.

3. Supporting key child health and nutrition outcomes in decentralized, integrated systems. One of the key programmatic challenges identified in Uganda -- and one which UNICEF and USAID may find worthwhile for future collaborative investment and evaluation -- is how to

support increased access, quality, use, and sustainability of key elements of child survival programming (such as immunization) in systems that are decentralizing. Such decentralization, and the process of integration that occurs at district and more peripheral levels, imply that the previous "vertical" program structures that formerly delivered such services are not the way in which to support these same interventions in the future.

The Uganda example suggests that support for improved coverage and sustainability of immunization (as an example of a focused intervention) may be achieved by increased district and local capacity to plan, to mobilize resources, to assume accountability for key outcomes, and to monitor those outcomes. However, experience strongly suggests that the process will not automatically do these things, and that the process must be managed and oriented ultimately toward the accomplishment of specific, agreed upon results.

Whereas in the past, UNICEF and others have been able to support central entities such as Uganda's UNEPI in carrying out such key program elements as "determination of vaccine needs" and "monitoring and maintenance of the cold chain". In the decentralized environment, achieving these same outcomes may require support for processes such as "improving district and local capacity to plan" and "mobilizing local resources". Increased coverage and improved disease surveillance may be supported by "development of community-based management information systems". Thus, for child survival, the question is how to invest resources in ways that most directly support the attainment of desired changes in the status of women and children and not just changes in process (whatever our philosophical position on the importance of those process changes).

The Uganda experience, and the direction established there by UNICEF, suggest that it may not be enough to simply identify additional new "line items" for funding aimed at supporting key program elements and outcomes. It will require substantial understanding of, and engagement in the process, as UNICEF has done in Uganda. Agencies and donors will need to work with countries to specify the relationship between investment in specific elements of the process and achievement of desired health outcomes. For example, it should be possible for countries to state the intended process by which investment in community sensitization, followed by community involvement in planning and information gathering, will lead to improved effectiveness and impact of such interventions as immunization. Based on these relationships, indicators of progress both in process and in key outcomes should be identified and monitored, and reasonable time frames set for progress in both (with outcome indicator improvement not expected immediately, but clearly targeted for early improvement).

The team noted that UNICEF had played an important role in linking the elements of the decentralization process to key outcomes (such as those specified in the Plans of Action for Children), and had worked with the government and districts to specify both process and outcome level indicators (although targets were not yet specified for a number o the outcome indicators). This role of UNICEF is likely to be continue to be critical in Uganda and in other countries that undertake such decentralization and reform processes.

Effectively, such a shift from support for line items to support for an identified process aimed at improved outcomes, will be a change from support of inputs to support of results. USAID and UNICEF may wish to consider further the feasibility and implications of such a change in approach.

4. The importance of country leadership and commitment in decentralization. The title of this section seems like a statement of the obvious. However, many countries have entered into broad "sectoral reform" reorganization of health and other sectors, without the clear vision and supportive commitment demonstrated by Uganda. The team came away with the strong sense that this vision and commitment play a critical role in keeping the process moving, developing the consensus and cooperation required, and allowing for the problem-solving, innovation, and even failure that are required to work out such a major change. For donors, the bottom line is that this dimension should be considered when investment in the sectoral reform process is being contemplated.

VI. UNICEF Country Programme:

Given the major decentralization of budgeting and administrative authority to the districts, sub-counties, and parishes, and the implications of this decentralization for programme delivery in the health sector, UNICEF's Uganda country programme in health with Government for the period of 1995-2000 has shifted its focus from project-based support in health to addressing the health problems of women and children in a broader perspective, with a strong emphasis on capacity building and the needs of the health worker; specifically, what skills are needed at the health worker and community level to serve the common problems facing children. UNICEF's Master Plan of Operations for 1995-2000 and the Health Programme Plan of Operations provide a detailed situation analysis and overview of programme components. To summarize, there are four main programme foci:

1) Capacity Building at the Community or Parish Level: UNICEF has been one of the key partners working with Government to work at the parish level (which represents approximately ____ villages), to build capacity within the community to assess their own needs. In the present decentralization plan, the parish level is the lowest administrative level focusing on development needs, just above the village councils (LC1). A major focus of the UNICEF health programme in Uganda is to assist in increasing the managerial skills of those managing resources for health, especially the Parish Development Committees (PDCs). Community capacity building will focus on health promotion, disease prevention and increased community involvement in the planning and implementation of appropriate interventions, with an emphasis also on basic facilities and improving the performance of health personnel.

2) Capacity Building at the sub-county and district levels for resource mobilization and management aimed at improved management, efficient utilization and increased allocation of resources to the health sector, particularly for primary health care;

3) Capacity Building for Policy Development at the national level, with a focus on quality assurance, policy, emergency response, and developing an enabling environment for the improvement of the health status of women and children with the limited resources available..

- assisting central level to develop skills for quality assurance and monitoring of health policy and implementation at the district level

4) CCA: Cross cutting issues with regard to community organization, communications and outreach, training.

Key areas of UNICEF support have been:

1. Participation in National Health Implementation Teams: To implement decentralization of the health system to the districts, sub-counties, and parishes, the Ministry of Health has formed four teams, each responsible for as series of districts. These teams consist of four members: MOH, MOLG, UNICEF, and a representative from the Uganda Community Based Health Care Association (an NGO umbrella organization). UNICEF plays a key role on these teams as a facilitator and as an advocate for NGO involvement in order to increase government skills in community outreach and involvement, an essential aspect of the decentralization process.

2. Development of training materials, together with the above team to train District Trainers and PDCs

3. Provision of funding for PDC development (capacity building)

VII. Funding of EPI, including. NIDS

1. External Government Donors:

a. USAID support: USAID support for EPI has come exclusively out of funds granted by the central Global and Africa Bureaus; the local USAID Mission is focused on other priorities, including Primary Health Care, Reproductive Health, HIV/AIDS.

NIDS ($200K for 1997)
Communication Strategies/Health Seeking Behavior ($88K for 1997)
Routine Immunization: Provision of Supplies for EPI ($177K for 1997)
Training Health Workers ($72K for 1997)

Quality Assurance/UNEPI ($85K for 1997)
Admin. and Program Support ($69K)

b. UK/ODA support: UK/ODA support has come out of unpredictable end of year funds. In 1995 these funds amounted to $.5 million; in 1996 the contribution was slightly over $1 million; in 1997 the contribution just provided is $2.2 million. (There is small carry-

over of $43K out of 1996 funds) It is unclear that the 1998 contribution will represent same level of funding as 1997; however, UNICEF and UKODA have discussed formulating a three year grant which would provide some predictability for programming and planning.

EPI Support is for:	Supervision of operational health workers
	Vaccine purchase, distribution of vaccines
	Transport, vehicles, supplies
NIDS support is:	$1 million

Also support for Procurement of ORS
Some administrative support

c. Swedish SIDA: Approximate annual contribution is $1.1 million. Balance of funds available for 1997 is $384K

SIDA support is for: NIDS
Purchase of Routine Vaccines and Supplies

d. Government of Norway: The Government of Norway made grant in Dec. 1996 intended to support Dec. and Jan. 1997 NIDS; given timing of grant, bulk of these funds remain and will be used later this year and early next.

Support $1.5 million for NIDS only.

2. Government of Uganda Support

1996/97 Government of Uganda has budgetted $640,000 for purchase of vaccines (through UNICEF?). $320,000 of these promised funds have been received. There is a question about whether the Government has the balance available. Government of Uganda support for vaccine purchase in previous budget was $320,000. (Check this last figure)

3. UNICEF Support

Out of its General Resources, UNICEF supports the Uganda EPI program by providing $390,000 for purchase of routine vaccine supplies.

4. Rotary International Support

Rotary's support is exclusively for purchase of OPV. UNICEF Kampala has available for 1997 a balance of $137,000 for this purpose.

5. WHO

Traditionally, these two UN agencies have worked closely together in facilitating EPI activities in Uganda, with WHO providing more input on policy issues at central level, and UNICEF providing more support at operational level, especially in community capacity building.

This relationship has become particularly cordial and complementary in Uganda, especially with having had to prepare the 1996 NIDs with UNEPI and the Government of Uganda. The Representatives of the two agencies have established a routine monthly meeting to discuss issues of common interest and/or needing special attention. The cooperation between them has been exemplary.

VIII. Conclusion:

A key challenge emerging from decentralization in Uganda is how to provide the essential technical training to ensure the quality of immunization service delivery, while also fostering an integrated approach to training and delivering services. The decentralized environment provides new opportunities for improving immunization coverage and disease control beyond the levels sustained over the last several years. These new opportunities create potential for new approaches for addressing long standing problems identified during past program reviews, such as high drop out rates, missed opportunities due to limited coordination with other PHC programmes, inadequate disease surveillance, and poor supervision. Decentralization also challenges the donors active in immunization on channeling their support in ways that will reinforce decentralization and integration, while also ensuring that immunization activities remain adequately supported.

ANNEX: Programme Data

DEMOGRAPHIC DATA

Total Pop = 19.5 million (Source = 1996 projection from 1991 census)
<1 pop (4.7% of total) = 932,840 (1996 projection)
<5 pop (20.5% of total) = 4.05 m (1996 projection)
0-15 pop (46.3% of total) = 9.1 m (1996 projection)
Non-pregnant Women aged 15-45 (17.8% of total) = 3.4 m (1996 projection)
Pregnant women (5.2% of total) = 989,000 (1996 projection)

Total number of districts = 39, to become 45 in 1997 (UNICEF, 1997) (LC-5)
Total number of counties = 162 (LC-4)
Total number of sub-counties = 878 (LC3)
Total number of parishes = 4,296 (LC-2)
Parish Development Committees (PDCs) formed = 150
PDCs trained = 13
Villages form LC-1
Total number of health units = (1,200 Gov't-run)
NB: about 60% of rural health units are run by under-qualified staff, primarily nursing aides (UNICEF, 1997).

IMMUNIZATION COVERAGE

Percent of children immunized by 12 months of age

Antigen	Source Routine reporting	Source UDHS/95
BCG	98% (1994)	79.4%
DPT3	79% (1994)	54.4%
Polio3	79% (1994)	52.6%
Measles	79% (1994)	45.2%

Percent of pregnant women immunized with two or more doses of Tetanus toxoid

TT2	76% (1994)	54.0% (pregnant women aged 20-34 yrs)

Immunization coverage by district

1. Percent immunization coverage in districts (**children completely immunized**) (source = UDHS, 1995):
34% coverage = 9 districts (mostly eastern Uganda)
35% " = 11 districts (mostly northern Uganda)
53% " = 7 districts (mostly south-eastern Uganda, including Kampala)
65% " = 12 districts (mostly eastern Uganda)

2. Percent **TT2 immunization of pregnant women** in districts
(source = UDHS, 1995)
47% coverage = 12 districts (mostly western Uganda)
53.7% " = 8 districts (mostly south-eastern Uganda, including Kampala)
57.5% " = 9 districts (mostly northern Uganda)
58.0% " = 9 districts (mostly eastern Uganda)

NIDs coverage in 1996

1st round = 95%
2nd round = 94%

UNEPI

Goal

Raise infant immunization coverage to at least 80% for DPT, OPV, and Measles, to 98% for BCG, and to raise tetanus toxoid immunization coverage for pregnant women to 90%, in order to reduce morbidity, mortality and disability due to the six target vaccine-preventable diseases.

Strategies for achieving goal

- strengthen and maintain routine immunization through improving infrastructure, training and supervision.
- introduce new strategies for accelerating coverage, i.e.NIDs.
- establish comprehensive disease surveillance system for early detection of outbreaks and early response.
- de-centralize immunization activities to district level and continue to build district capacity and capability.
- strengthen collaboration with NGOs, locally-based agencies and international organizations.

Vaccination strategies

No. of static units = 1,450
Outreach: each static unit with an RCW42 refrigerator is expected to do at least 1 outreach per week. Health units with a bigger refrigerator capable of freezing more ice packs (e.g. Sibir) can carry out more than 1 outreach sessions per week. The total number of outreach sessions carried out is known after end-of-year reports are made.
Mobile strategy is not recommended.

Staffing situation

Programme manager
Assistant Prog Manager/NIDs Coordinator (MD, Epidemiologist)
2 Medical Officers (NIDs)
1 Surveillance Officer (MD)
1 Cold chain Technician
1 Social Mobilisation focal person
1 National EPI Laboratory Head (MD)

Cold Chain

Central level 2 cold rooms (for storing BCG, DPT, TT and measles vaccines at +4C to +8C)
41 deep freezers (35 for storing polio vaccines at -20C, 6 for freezing ice packs)
2 power supply systems (1 regular city power line and 1 generator)
1 automatic temperature weekly graphic recorder for cold room
An alarm system for power failure
A central radio call system linking 57 radio call units country-wide.
6 cold chain assistants
NB: Cold chain well maintained (Univ of Makarere report, 1997)

District level

Each district headquarters has a vaccine store with deep freezers for stocking polio vaccine at 20C, as well as refrigerators for stocking the other vaccines at +4C - +8 C. These vaccines are destined for the government-run health units in the district. At least one trained cold chain technician is part of the District Health Team, and should supervise the use and the maintenance of the cold chain equipment in all the health units in the subcounties and parishes of the district. There are a total of 72 cold chain assistants covering all the districts.

NB: Some districts have maintained excellent cold chain systems while others are poorly managed, with shortcomings ranging from poor refrigeration of antigens to poor monitoring and documentation of refrigerator temperatures.

Sub-district stores

There are 3-4 functional sub-district stores in each district, whose role is to ensure that vaccines are found closer to the operational health units than the district store. These sub stores have facilities for keeping vaccines at both -20C and 4-8C.

Health Unit level

There are 1,757 cold chain facilities in all the health units in the country. All static health units possess refrigerators, be they run by electricity (regular or solar-power), gas or kerosene, that store vaccines at 4-8C. The additional freezers purchased for NIDs in 1996 are being sent to

localities where more static units are being proposed, especially in areas which previously had no facilities for storing frozen polio vaccines.

Although some health units are run by trained registered nurses/ midwives , many are staffed mostly by nursing aides, trained as vaccinators. Frequent supervision therefore necessary, but not feasible due to constraint of inadequate personnel at both district and central levels.

QUALITY OF IMMUNIZATION

University of Makarere report (1997) cites poor quality of immunization in some districts due to inadequate facilities, knowledge and skills. Malpractices included sharpening of reusable needles, sterilisation by boiling instead of by steam, and incapacity to correctly give intradermal BCG injections. While training of EPI care providers is the responsibility of the central level of UNEPI, in conjunction with the training unit of the MOH, supervision of the staff at health unit level is carried out by the District Health Teams (DHMTs). Supervision is done mostly by using a check-list to determine immunization practices and the status of cold chain equipment in the health unit. Deficiencies are recorded and notified to the district level. Whether or not remedial action is always taken is not clear.

APPENDIX C

PROPOSED UNEPI PROGRAMME REVIEW OF 1997, WITH TERMS OF REFERENCE

THE REPUBLIC OF UGANDA

MINISTRY OF HEALTH
P.O. BOX 8 Tel: 20795/6,
ENTEBBE 20334
Fax: 256-42-21184
Telex: 988-61554

Uganda National Expanded Programme on Immunisation

Date: 1st May 1997 Ref. No. M - 17

The Director General Health Services

Thru: Director Health Services (Operations)
Ministry of Health.

PROPOSED UNEPI REVIEW OF 1997

Background

UNEPI was first launched on October 5, 1983 by the Government of Uganda with the support of UNICEF, Save the Children Fund (U.K.) and WHO in an effort to revive immunization services which had a coverage of merely 5% at the time.

The goal of UNEPI was to make immunization complementary to MCH and PHC activities but was more focused on raising immunization coverage in the infant population, the under fives and women of child-bearing age, more particularly the pregnant women.

It was assumed that the high coverage against the vaccine preventable diseases: Measles, polio, neonatal tetanus, pertussis, diphtheria and tuberculosis would drastically bring down the high infant morbidity, disability and mortality in the target population.

Due to instability in the country, little progress was made until after the relaunching of the programme in January 1987, in order to accelerate immunization activities through infrastructure strengthening, building up an efficient cold chain system, training of mid-level managers and operational level staff and involvement of the communities, other line Ministries and NGOs.

By 1990 (Universal Child Immunization year) UNEPI had achieved a national reported coverage of 77%. Since that time there has been little marginal gains in terms of coverage (the coverage has almost levelled around 78% per antigen) per year.

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UNEPI reviews

It is important to point out that UNEPI reviews are not new. As a matter of fact, external reviews have been carried out biannually and the reports are available.

The first programme review of UNEPI was conducted in 1987 as an integral part of PHC. The reviewing team found that UNEPI had made considerable progress especially in establishing the cold chain system and an infrastructure which increased accessibility of immunization services to most people. The second and third programme reviews were carried out in 1989 and 1994 respectively. The cold chain including solar units were separately reviewed by WHO in 1990. A review had been scheduled for 1996 but this could not take place because of NIDs.

However in all the four reviews, the main problems noted persistently included high drop out rates, missed opportunity limited coordination with the other PHC programmes and an inadequately established disease surveillance system to monitor the impact of the Programme on disease incidence. The Ministry of Health, Health Planning Unit and CDC* were virtually non-functional to provide other data needed for assessment and evaluation of disease trend. This deficiency still exists in the Ministry of Health although there appears some kind of start.

Since the last review in 1994, there have been changes that could have affected the programme, including among others, lack technical of support supervision in all fields at all levels; the district decentralization programme; civil service restructuring; integrated approach to the general health service; introduction of many other programmes and projects which have overburdened district health staff; community participation for people empowerment for sustainable PHC; the implementation of National Immunization Days; and other changes that affect both central, district, NGOs and the community.

This year's review need to be carried out within the context of the various changes that have and continue to take place. If the review does not examine the impact which these changes have on the planning and implementation of EPI activities it is likely to end up with misleading conclusions.

One needs to know the impact of health staff reduction and retrenchment effect on immunization services in all the districts; the effect of rampant insecurity in the north and the Uganda/Unicef Country Programme implementation approach which was introduced two years ago.

UNEPI activities are no longer monolithic but integrated and therefore the various changes that have taken place have affected its original focus as a vertical programme - mainly achievement of high immunization coverage. District staff have had to be involved in many other activities and others have been retrenched leaving fewer people to do a lot of work.

A decision has to be made whether an external or a National review team or a combination of both has to be fielded. The cost of the review will depend on the choice of the team and the

* Communicable Disease Control, MOH

objective of the review.

There is need to discuss with Donors for full funding or partial funding.

I would, however, advise that reviews require a lot of time and there is no way we can conduct reviews when we are involved in NIDs. I would suggest that the review be carried out after this year's NIDs - may be between October and January 1998.

I have attached provisional terms of reference for your consideration. If you have other reasons that these terms of reference will not bring out, you are at liberty to suggest additional ones.

John F. Z. Barenzi
Ag. CHS PHC/PROGRAMME MANAGER UNEPI

att...

c.c. Permanent Secretary
Ministry of Health

c.c. WHO Representative

c.c. Dr. Ivone Rizzo
Chief, Health Section
UNICEF.

Management

- Review the programme plan of operations and strategies of UNEPI to meet the set targets and objectives of the programme.

- Review the planning and budgeting process for immunization services both at the centre and district levels.

- Review the funding of the programme both from donors and the government, clearly stating how the funds flow from the source to the implementors.

- Assess the utilization and management of EPI operational funds at national, district and peripheral levels in light of the cost per child immunised both for routine and supplimentary immunisation (NIDs).

- Assess the current and potential resource mobilisation as well as participation of the community in the planning, implementation and monitoring of immunization activities at the district and lower levels with regard to promoting quality of care, increase accessibility and sustainability of immunization activities in the communities.

- Assess the management, supervision and coordination of immunization services at the centre, district, sub-county and health unit levels in the country to achieve high immunization coverage.

- Assess the capacity of decentralized districts to assume greater management and funding responsibility immunization services in future.

- Assess the status of staffing at the centre, district and peripheral levels to plan and conduct effective immunization services.

- Assess the level of integration, coordination and sharing of resources of immunization services with other MCH/PHC services at the centre, district and lower levels.

- Assess the inter-sectoral/multi-sectoral collaboration within Ministry of Health departments and other line ministries as well as the donors and NGOs, both at the centre and district.

- Evaluate the impact of implementing National Immunization Days on the Routine Immunization service delivery.

Cold Chain and Logistics:

- Assess the process of vaccine acquisition, adequacy, storage and distribution at all levels, with emphasis on vaccine potency and usage at service delivery point.

- Assess the acquisition, adequacy and storage of logistics for maintenance of an effective cold chain at all levels.

- Assess the quality of training of personnel involved in for cold chain management at all levels.

- Assess the use and adequacy of cold chain monitoring tools at all levels.

- Assess the injection safety practices at all levels (quality of equipment, sterilisation practices and storage).

Training and social Mobilization:

- Assess the level of community awareness and participation in the programme.

- Determine the effectiveness of social mobilization and Health Education activities in promoting community participation and awareness of UNEPI. Identify the most effective means of social mobilization.

- Identify major constraints that hinder effective EPI service utilisation and suggest ways and means of overcoming them.

- Assess the knowledge, attitude and practices of Health care workers on delivering vaccination, sterilizing vaccination equipment.

- Assess the quality of EPI training and identify the EPI training needs for all workers at all levels.

materials.

Disease Surveillance

- Assess the vaccine quality control facilities available at UVRI.
- Assess the data collection and tools used at all levels.
- Assess the immunization record keeping and monitoring practices at all levels.
- Review the present information flow system identifying strengths and weaknesses at all levels.
- Assess information utilisation at all levels.
- Review and assess the appropriateness and usefulness of performance indicators for the surveillance system (timeliness, completeness and accuracy). Make a recommendation for developing an active, sustainable and reliable disease surveillance system.
- Assess the impact of the programme on the disease pattern in the target population.

Equipment & Supplies

- Review the adequacy, storage, delivery and record keeping of UNEPI equipment throughout the entire system.

Transport

- Study the existing transport system existing at the centre. district, sub-county and Health Unit and make recommendations.

APPENDIX D

TERMS OF REFERENCE FOR THE 1997 UNEPI REVIEW, SUGGESTED REVISION

Appendix D

Terms of Reference for the 1997 UNEPI Review

Suggested revision - 8 August 1997

MANAGEMENT

1. Review the programme plan of operations, strategies, and planning process; determine if the plans and strategies are appropriate for meeting the targets and objectives of the programme; and recommend any necessary changes that will better enable the programme to achieve its targets and objectives.

2. Review the responsibilities and activities of the UNEPI central units and staff, and recommend the modifications needed for improving programme management and operations in the context of the changing environment for delivering immunizations in Uganda (e.g. decentralization, the Community Capacity Building initiative, reductions in MOH staff, changes in donor support, NIDs).

3. Evaluate the impact of implementing National Immunization Days on routine management at central and district levels including any effects on the routine monitoring and reporting, the development of the disease surveillance system, and routine immunization coverage.

4. Assess the inter sectoral/multi sectoral collaboration within the Ministry of Health departments and other line ministries as well as with the donors and NGOs, both at the centre and district. Make recommendations on improving collaboration within the MOH and with the donors and NGOs.

5. Review the funding of the programme, both from donors and the government and including funds for NIDs; describe how the funds flow from the source to the implementors; determine if the funding allocations match the various programme needs (cold chain, vaccination supplies and equipment, logistics, social mobilization, training, monitoring and supervision, and disease surveillance); make any necessary recommendations on how funding mechanisms can be improved for programme management.

DISTRICT CAPACITY

1. Assess the capacity of the districts to assume greater management and funding responsibilities for immunizations services which are now required under the policies of decentralization. In view of decentralized funding, advise the MOH and the donors on an approach(es) for ensuring the long term funding needs for immunization services in the districts.

2. Review the district health plans and strategies for delivering immunizations and determine if they adequately cover the activities and funding required for achieving the immunization targets and objectives. Recommend any changes required for improving district plans, planning, or strategies on immunization services.

3. Assess the level of integration, coordination, and sharing of resources for immunization services with the other MCH/PHC services at district and lower levels. Note areas where integration and coordination can be improved.

COLD CHAIN and LOGISTICS

1. Assess the process of vaccine forecasting, acquisition, storage, and distribution at all levels with emphasis on vaccine potency and usage at service delivery points.

2. Assess the adequacy of maintenance, monitoring, and supervision of the cold chain at all levels.

3. Assess the quality of training of personnel involved in cold chain management at all levels.

4. Assess injection safety practices, including the quality of equipment, sterilization practices, and injection technique.

SOCIAL MOBILIZATION

{I suggest that the TOR for Social Mobilization are covered separately by survey.}

1. Assess the level of community awareness and knowledge of: immunizations, the EPI diseases, NIDs, and polio eradication.

2. Determine the effectiveness of social mobilization and health education materials in promoting awareness of EPI and also NIDs. Identify the most effective means of social mobilization.

TRAINING

1. Assess the quality of EPI training in terms of knowledge and practices of health workers, the frequency of training, and the targeted audience. Identify the EPI training needs for health workers at all levels.

DISEASE SURVEILLANCE

{Because UNEPI is only in the implementation phase of the activities for improving disease surveillance and has ongoing assistance from BASICS and WHO on disease surveillance, it may be better to defer the formal review of Surveillance until next year.}

TRANSPORT

Study the existing transport system at central, district, sub-county and health unit levels and make recommendations. {In view of decentralization and since vehicles are no longer distributed by UNEPI, Transport should probably be a part of a broader review of transport by the MOH.}